In the Claims

Please cancel claims 21-23 without prejudice.

1. (Original) An image processing apparatus, comprising:

a change detecting portion for detecting a change between picture planes of input motion picture data and outputting a first control signal indicating a transition from a small change state to a large change state and a second control signal indicating a transition from a large change state to a small change state; and

an operation control portion for controlling starting and stopping of recording or transmission of input motion picture data according to said first control signal and said second control signal, wherein

during recording or transmission, said operation control portion controls to stop recording or transmission of said input motion picture data if no outputting of said first control signal occurs until after a prescribed time T1 elapses after said second control signal is output.

2. (Original) The image processing apparatus according to claim 1, wherein said change detecting portion divides a picture plane of input motion picture data into blocks of prescribed size and includes

a first counter for counting number of blocks in which a sum of squared difference of luminance values between picture planes for pixels contained in a block is at least a prescribed threshold value S1, or number of blocks in which a length of a motion vector for said block is at least a prescribed threshold value V1, and

a second counter for counting number of blocks in which said sum of squared difference is at least a prescribed threshold value S2 or the length of said motion vector is at least a prescribed threshold value V2, and wherein

said first control signal is output based on said first counter being at least the prescribed threshold value C1, and

said second control signal is output based on said second counter being at most the prescribed threshold value C2.

3.   (Original) The image processing apparatus according to claim 2, wherein

said threshold values S1, V1, C1, S2, V2, and C2 are respectively set to

different values.

4.   (Original) The image processing apparatus according to claim 1, further

comprising:

a motion compensation prediction portion for dividing a picture plane of input

motion picture data into prescribed regions, performing for each region a motion

compensation prediction with a reference picture plane stored in a frame memory, and

outputting a prediction error, a motion vector of said each region, and a sum of

squared difference of luminance values of pixels within said region between picture

planes; and

a prediction error coding portion for coding said prediction error and outputting

coded motion picture data, wherein

said change detecting portion detects a change between picture planes from

said motion vector and said sum of squared difference and outputs a first control

signal indicating a transition from a small change state to a large change state and a

second control signal indicating a transition from a large change state to a small

change state.

5.   (Original) The image processing apparatus according to claim 4, wherein

said frame memory stores a local decoded image derived by adding a prediction

picture plane output from said motion compensation prediction portion and a decoded

result of a prediction error output from said prediction error coding portion when

input motion picture data is being recorded or transmitted, and stores a picture plane

of input motion picture data when recording or transmission is suspended.

6.   (Original) The image processing apparatus according to claim 1, further comprising:

an announcing portion for announcing to outside of apparatus that a recording operation or a transmission operation is currently taking place, according to control of starting and stopping of recording or transmission of input motion picture data by said operation control portion.

7.   (Original) The image processing apparatus according to claim 6, wherein

said announcing portion indicates that recording or transmission operation is currently taking place by illuminating an LED or a lamp.

8.   (Original) The image processing apparatus according to claim 6, wherein

said announcing portion announces that a change in an operative condition has occurred by providing a sound upon starting of recording or transmission and/or stopping of recording or transmission.

9.   (Original) An image processing apparatus, comprising:

a change detecting portion for detecting a change between picture planes of input motion picture data and outputting a first control signal indicating a transition from a small change state to a large change state and a second control signal indicating a transition from a large change state to a small change state; and

an operation control portion for controlling starting and stopping of recording or transmission of input motion picture data according to said first control signal and said second control signal, wherein

said operation control portion controls to start recording or transmission of input motion picture data as soon as an operation is activated for controlling starting and stopping of recording or transmission by said operation control portion, and thereafter controls to stop recording or transmission of said input motion picture data when a prescribed time period T2 has elapsed without said first control signal being output.

10. (Original) The image processing apparatus according to claim 9, wherein said operation control portion controls to stop recording or transmission of input motion picture data if no outputting of said first control signal occurs until after a prescribed time T1 elapses after said second control signal is output.

11. (Original) The image processing apparatus according to claim 10, wherein said time period T1 and said time period T2 are respectively set to different values.

12. (Original) The image processing apparatus according to claim 9, wherein said change detecting portion divides a picture plane of input motion picture data into blocks of prescribed size and includes

a first counter for counting number of blocks in which a sum of squared difference of luminance values between picture planes for pixels contained in a block is at least a prescribed threshold value S1, or number of blocks in which a length of a motion vector for said block is at least a prescribed threshold value V1, and

a second counter for counting number of blocks in which said sum of squared difference is at least a prescribed threshold value S2 or the length of said motion vector is at least a prescribed threshold value V2, and wherein

said first control signal is output based on an output from said first counter being at least the prescribed threshold value C1, and

said second control signal is output based on an output from said second counter being at most the prescribed threshold value C2.

13. (Original) The image processing apparatus according to claim 12, wherein said threshold values S1, V1, C1, S2, V2, and C2 are respectively set to different values.

14.   (Original) The image processing apparatus according to claim 9, further comprising:

a motion compensation prediction portion for dividing a picture plane of input motion picture data into prescribed regions, performing for each region a motion compensation prediction with a reference picture plane stored in a frame memory, and outputting a prediction error, a motion vector of said each region, and a sum of squared difference of luminance values of pixels within said region between picture planes; and

a prediction error coding portion for coding said prediction error and outputting coded motion picture data, wherein

said change detecting portion detects a change between picture planes from said motion vector and said sum of squared difference and outputs a first control signal indicating a transition from a small change state to a large change state and a second control signal indicating a transition from a large change state to a small change state.

15.   (Original) The image processing apparatus according to claim 14, wherein

said frame memory stores a local decoded image derived by adding a prediction picture plane output from said motion compensation prediction portion and a decoded result of a prediction error output from said prediction error coding portion when input motion picture data is being recorded or transmitted, and stores a picture plane of input motion picture data when recording or transmission is suspended.

16.   (Original) The image processing apparatus according to claim 9, further comprising:

an announcing portion for announcing to outside of apparatus that a recording operation or a transmission operation is currently taking place, according to control of starting and stopping of recording or transmission of input motion picture data by said operation control portion.

17. (Original) The image processing apparatus according to claim 16, wherein said announcing portion indicates that recording or transmission operation is currently taking place by illuminating an LED or a lamp.

18. (Original) The image processing apparatus according to claim 16, wherein said announcing portion announces that a change in an operative condition has occurred by providing a sound upon starting of recording or transmission and/or stopping of recording or transmission.

19. (Original) An image processing apparatus, comprising:

a motion compensation prediction portion for dividing a picture plane of input motion picture data into prescribed regions, performing for each region a motion compensation prediction with a reference picture plane stored in a frame memory, and outputting a prediction error, a motion vector of said each region, and a sum of squared difference of luminance values of pixels within said region between picture planes;

a prediction error coding portion for coding said prediction error and outputting coded motion picture data;

a change detecting portion for detecting a change between picture planes from said motion vector and said sum of squared difference and outputting a first control signal indicating a transition from a small change state to a large change state and a second control signal indicating a transition from a large change state to a small change state; and

an operation control portion for controlling starting and stopping of recording or transmission of input motion picture data according to said first control signal and said second control signal.

20.   (Original) The image processing apparatus according to claim 19, wherein said frame memory stores a local decoded image derived by adding a prediction picture plane output from said motion compensation prediction portion and a decoded result of a prediction error output from said prediction error coding portion when input motion picture data is being recorded or transmitted, and stores a picture plane of input motion picture data when recording or transmission is suspended.

21. (Canceled)

22. (Canceled)

23. (Canceled)